

UCHL3 (16N15) Rabbit Monoclonal Antibody

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Catalog # AP93773

Product Information

Application	WB, IHC-P, IF
Primary Accession	P15374 , Q9JKB1 , Q91Y78
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Calculated MW	26183

Additional Information

Gene ID	7347
Dilution	WB~~1:1000 IHC-P~~N/A IF~~1:50~200
Storage Conditions	-20°C

Protein Information

Name	UCHL3 {ECO:0000303 PubMed:19047059, ECO:0000312 HGNC:HGNC:12515}
Function	Deubiquitinating enzyme (DUB) that controls levels of cellular ubiquitin through processing of ubiquitin precursors and ubiquitinated proteins (PubMed:19154770, PubMed:21762696, PubMed:22689415, PubMed:2530630). Thiol protease that recognizes and hydrolyzes a peptide bond at the C-terminal glycine of either ubiquitin or NEDD8 (PubMed:19154770, PubMed:21762696, PubMed:22689415, PubMed:2530630, PubMed:9790970). Has a 10-fold preference for Arg and Lys at position P3", and exhibits a preference towards 'Lys-48'-linked ubiquitin chains (PubMed:19154770, PubMed:21762696, PubMed:22689415, PubMed:2530630). Can hydrolyze UBB(+1), a mutated form of ubiquitin which is not effectively degraded by the proteasome and is associated with neurodegenerative disorders (By similarity). Involved in DNA repair via homologous recombination (HR) by mediating deubiquitination of RAD51 in response to DNA damage, promoting interaction between RAD51 and BRCA2 (PubMed:27941124). Deubiquitinates ENAC in apical compartments, thereby regulating apical membrane recycling (By similarity). Indirectly increases the phosphorylation of IGFIR, AKT and FOXO1 and promotes insulin-signaling and insulin-induced adipogenesis (By similarity). Required for stress-response retinal, skeletal muscle and germ cell maintenance (By similarity). May be involved in working memory (By similarity).
Cellular Location	Cytoplasm.

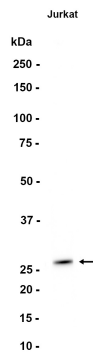
Tissue Location

Highly expressed in heart, skeletal muscle, and testis.

Background

The protein encoded by this gene is a member of the deubiquitinating enzyme family. Members of this family are proteases that catalyze the removal of ubiquitin from polypeptides and are divided into five classes, depending on the mechanism of catalysis. This protein may hydrolyze the ubiquitinyl-N-epsilon amide bond of ubiquitinated proteins to regenerate ubiquitin for another catalytic cycle. Alternative splicing results in multiple transcript variants that encode different protein isoforms. [provided by RefSeq, Aug 2012]

Images



Western blot analysis of extracts from Jurkat cells using AP93773 at 1:1000.

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